



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,772	09/15/2003	Ronald P. Doyle	RSW920030174US1	2183
23550 7590 10/01/2007 HOFFMAN WARNICK & D'ALESSANDRO, LLC 75 STATE STREET 14TH FLOOR ALBANY, NY 12207			EXAMINER WAI, ERIC CHARLES	
			ART UNIT 2195	PAPER NUMBER
			MAIL DATE 10/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/662,772

Applicant(s)

DOYLE ET AL.

Examiner

Eric C. Wai

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/18/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claim 11 recites a "system"; however, it appears that the system would reasonably be interpreted by one of ordinary skill in the art as software, per se, failing to be tangibly embodied or include any recited hardware as part of the system. While the specification provides support that the system includes both hardware and software, the claims stand on their own, and are read in light of their broadest reasonable interpretation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2195

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirschfeld et al. (US Pat No. 6,990,666 hereinafter Hirschfeld).

7. Regarding claim 1, Hirschfeld discloses a method of managing resources in a system, the method comprising:

determining a demand for a service (col 2 lines 43-61, wherein demand by users for a server providing a service is an important factor in allocation resources);

determining many attributes of the system (col 3 lines 1-13, wherein there are a variety of factors that are determined); and

provisioning a resource for the service based on the demand and the attribute (col 3 lines 54 to col 4 line 2, wherein usage of resources is optimized).

8. Hirschfeld differs from claimed invention by teaching using a variety of attributes to provision a resource. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to only utilize a demand and a single attribute. One would be motivated by the desire to simplify the provisioning of a resource.

9. Regarding claim 2, Hirschfeld teaches that the attribute comprises a demand for at least one other service sharing the resources (col 3 lines 4-6, "incorporates dependencies and relationships between physical and logical resources").

Art Unit: 2195

10. Regarding claim 3, Hirschfeld teaches that the resources comprise at least one software server (col 3 lines 36-37, virtualized logical server), and wherein the attribute comprises a software status of the at least one software server (col 3 lines 36-50, wherein the state of a server is incorporated into a cost).

11. Regarding claim 4, Hirschfeld teaches that the resources comprise at least one software server (col 3 lines 36-37, virtualized logical server), but does not explicitly teach that the attribute comprises a cache state of the at least one software server.

12. It would have been obvious to one of ordinary skill in the art at the time of the invention to include provisioning resources based on a cache state. One would be motivated by the desire for more efficient use of resources by reducing the necessity to replenish the cache with new data.

13. Regarding claim 5, Hirschfeld does not explicitly teach that the attribute comprises a time period required to provision at least one of the resources for the service.

14. Hirschfeld teaches using the cost to optimize usage of resources (col 4 lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to factor in a time period required to provision a resource into the cost of doing so.

15. Regarding claim 6, Hirschfeld teaches that the attribute comprises a load on the image system (col 3 line 4, "usage").

Art Unit: 2195

16. Regarding claims 7-10, Hirschfeld teaches the method as claimed in claims 1-6.

17. Regarding claim 11-16, they are the system claims of claims 1-6 above.

Therefore, they are rejected for the same reasons as claims 1-6 above.

18. Regarding claim 17-20, they are the program product claims of claims 1-6 above.

Therefore, they are rejected for the same reasons as claims 1-6 above.

Response to Arguments

19. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2195

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EW

MENG-AL T. #1
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100